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EXAMINER	
LEIBY, CHRISTOPHER E	

ART UNIT	PAPER NUMBER
2629	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/574,970	YOKODATE ET AL.	
	Examiner	Art Unit	
	CHRISTOPHER E. LEIBY	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 March 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *17,18,28,35,58,61-64 and 68-70* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *17,18,28,35,58,61-64 and 68-70* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Detailed Action

1. **Claims 17-18, 28, 35, 58, 61-64, and 68-70** are pending.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 17 and 28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims describe wherein a main control unit controls both a main display and LED display panel. However, the specification repeatedly states that the main control unit controls the LED panel not both. The closest to the subject matter is found in paragraph [0055] and figure 3 of the patent application publication of the current invention (2008/0212269) wherein the main control unit takes charge of control of the overall portable telephone but not specifically that the main control unit controls both the main display and LED display.

Claims 68 and 70 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to

reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claim describes wherein the memory stores input display data on an LED by LED basis however the specification repeatedly states that the memory stores a pattern or just simply data to be displayed by the LEDs and not that the data is stored on an LED by LED basis. It is noted that a pattern for display in a matrix arranged fashion enables memory storage in vector arrangements. These vectors correlate to particular LED locations however this is not described in the specification.

Claims 17 and 28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The main control unit does not describe any way of which is control the display and LED panel.

Claims 68 and 70 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention, for the reasons given above.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 17, 35, and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Takagi et al.** (US Patent Application Publication 2003/0189557), herein after referred to as Takagi, in view of **Engstrom** (US Patent 6,944,482) and further in view of **Park et al.** (US Patent Application Publication 2005/0038982).

Regarding **independent claim 17**, Takagi discloses a portable apparatus (*abstract reference portable phone*) comprising:

a hinge coupling an end of an operation-side casing having an operation part and an end of a display-side casing having a main display part with each other for pivotable movement thereof (*figure 2 reference hinge connecting display side casing 12 and operational side casing 14 allowing opening and closing motions shown in figures 1 and 2*),

an LED display panel which is arranged in a display window formed on a casing surface of said display-side casing other than a surface provided with the main display part (*paragraph [0004] wherein secondary display, shown in figure 1 reference 18, can be an LED display*),

wherein

said operation part and said main display part are respectively provided on surfaces of said operation-side casing and said display-side casing which face each other in their closed positions (*figure 2 reference display 16 on display side 12 which in the closed position about axis shown in figure 2 would face operation part 20 on operation side 14*);

said LED display panel is provided on a surface of said display side casing opposed to the surface provided with the main display part (*figure 1 reference display side 12 with LED display 18 on opposite side of main display 16 shown in figure 2*).

Takagi does not disclose any specifics for the secondary display other than it is an LED display (*paragraph [0004]*) nor does Takagi disclose the degree of rotation about an axis that is perpendicular to the core of the axis of the hinge.

Takagi does show an undisclosed degree of rotation almost at 180 degrees in relation to both parts of the device in figure 2. Further Takagi may not disclose specifics of the secondary display besides that of it possibly being an LED display figures 4 and 6 and paragraphs [0030]-[0032] disclose a backlight to illuminate the display enabling the display to be visualized by the user.

Engstrom does disclose specifics for an array of LEDs as a secondary display for a portable phone (*abstract and figure 3a*) and which has a plurality of light-emitting diodes (LEDs) outwardly projecting light and matrix-arranged in a plane (*figure 3a reference 1114a and column 9 lines 45-58 wherein the LEDs can be arranged on the backside of the main display arranged in multiple rows and columns*);

a display control unit controlling display contents of said plurality of light-emitting diodes of said LED display panel on the basis of input display data input by a user through said operation part (*figure 1 reference 1102 and controller 1112 specifically a controller for controlling visual data for secondary display of LEDs 1114 and column 5 lines 30-62 wherein the contents of the LEDs will be directed to emit light when a user inputs data on an operation part to select a menu and further to practice Morse code for non-audible calls*); and

a main control unit controlling both said main display part and said LED display panel and outputting said input display data displayed on said LED display panel to said display control unit (*figures 1 and 2 reference 1102 and 1208 respectively which control the LED display and figure 1 reference 1122 which includes a processor and main display further reference figure 5 microprocessor 1503 is described as being the earlier mentioned processor of figure 1 which is connected to a bus which connects to various other components of the phone including the visualizer 1102. processor connected to a bus line whose sole purpose is to process signals of that bus line is seen as a main control unit to control the sub control units such as the visualizer, DSP, and GPIO*).

It would have been obvious to one skilled in the art at the time of the invention to combine Takagi's portable phone with a secondary LED display with the secondary LED display specifics of Engstrom in order to display a simple display of an incoming call or other information as disclosed by Engstrom (*abstract*).

Further it would have also of been obvious to one skilled in the art at the time of the invention that even though Takagi does not disclose specifics for the secondary display, besides it possibly being an LED display, that such a display

utilizing a backlight similar to that of an LCD would utilize LEDs in a matrix addressable fashion as would be considered normal in the art for any display.

Park discloses a hinge rotation about an axis that is perpendicular to the core of the axis of the hinge as disclosed in figures 1 and 2 and paragraphs [0007]-[0008].

It would have been obvious to one skilled in the art at the time of the invention to use Park's hinge assembly in order to facilitate the use of a single product in various function/operations modes as disclosed by Park (*abstract and paragraphs [0007]-[0008]*) such as a pda and a phone function/operation.

Regarding **claim 35**, Takagi and Engstrom disclose a portable apparatus, wherein said main display part has a higher resolution than said LED display panel (*Engstrom: discloses a secondary LED display with only a couple of LEDs setup in an array as shown in figure 3a reference 210, wherein the dot pitch between each LED of the secondary display is inherently greater than the LCD main display, even if the columns and rows are increased as described in column 9 lines 45-58, as disclosed by Takagi hence the main display has a higher resolution than the LED dispaly*).

Regarding **claim 61**, Engstrom discloses a portable apparatus, wherein a display pattern to be displayed on said LED display panel is graphic pattern, a design pattern or a letter pattern (*abstract wherein visualizations are used to convey information such as complimentary graphics of non-graphics content and/or visual representation of sound which are graphic patterns or design patterns*).

Regarding claim 68, Engstrom discloses a portable apparatus, further comprising: a memory, wherein the input display data input by the user is input

on an LED by LED basis and is registered in the memory on an LED by LED basis

4. **Claims 28, 62-64, and 69** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Takagi-Engstrom-Park** as applied to claim 17 above, and further in view of **Hawkins et al.** (US Patent 7,356,361), herein after referred to as Hawkins.

Regarding **independent claim 28 and dependent claim 69**, Takagi and Engstrom disclose a portable apparatus as recited in independent claim 17.

Engstrom discloses wherein the main control unit switches display contents of the LED display panel under a display state by operation of operation keys (*column 8 lines 21-27 wherein LEDs may make visualizations dependant upon key stroking pattern corresponding to a menu selection made further column 5 lines 30-62 wherein the contents of the LEDs will be directed to emit light when a user inputs data on an operation part to select a menu and further to practice Morse code for non-audible calls*).

Neither Takagi nor Engstrom disclose a portable apparatus further comprising: an operation key operable in a state that said operation-side casing and said display- side casing are in their closed position, wherein the main control unit switches display contents of the LED display panel between power on display state and a power off state and switches the contents of the LED display panel under a power on display state by operation of said operation key.

Hawkins does disclose a portable apparatus further comprising: an operation key operable in a state that said operation-side casing and said

display- side casing are in their closed position (*figure 1c reference 112, 114, 116, 148, 118, and 120 are all operable when in the closed position*) operation of a particular key enables the display to power on and power off and switch the display contents under a power on display state by operation of said key (*figure 1c and 11a reference 112 described to turn off and on the telephone which effectively turns on and off the display and any contents thereof*).

It would have been obvious to combine Hawkins cover to enable operation of buttons to Takagi and Engstrom's portable device to operate the buttons while the lid is closed so that a user may still physically access the device to receive input via the user as disclosed by Hawkins (*abstract*).

Regarding **claim 62**, Takagi discloses a portable apparatus, wherein, the main display part is provided on a surface of said display-side casing facing said operation-side casing when the operation-side casing and the display-side casing are in their closed position (*figures 1 and 2 reference main display 16 facing operation side 20 when closed*).

Regarding **claim 63**, Takagi discloses a portable apparatus, wherein the LED display panel is provided on a surface of said display side casing opposed to the surface provided with the main display part (*figure 1 reference 18*).

Regarding **claim 64**, Engstrom discloses a portable apparatus, wherein a display pattern to be displayed on said LED display panel is graphic pattern, a design pattern or a letter pattern (*abstract wherein visualizations are used to convey information such as complimentary graphics of non-graphics content and/or visual representation of sound which are graphic patterns or design patterns*).

5. **Claims 18 and 58** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Takagi-Engstrom-Park** as applied to claim 17 above, and further in view of **Lee** (US Patent 7,110,796).

Regarding **claims 18 and 58**, Engstrom discloses that the portable device uses LEDs as a secondary display.

Neither Takagi nor Engstrom disclose the portable apparatus, that there is a battery (however inherent to a portable device) or wherein the battery is provided in the operation-side casing.

Lee does disclose a portable apparatus, wherein the battery is provided in the operation-side casing (*figure 4a reference 148*).

It would have been obvious to one skilled in the art at the time of the invention to combine Lee's battery position with Takagi and Engstrom's portable phone in order to enable the user to easily remove or place the battery.

Response to Arguments

6. Applicant's arguments with respect to claims have been considered but are unpersuasive. The supplies arguments come in two parts addressed in the order presented. In regards to the first part relating towards the newly amended subject matter, applicant argues that Engstrom does not enable contents of the LEDs to be displayed via input by a user through operation part and that the control of both displays is done via a main control unit. The evidence supplied by

applicant is that Takagi is silent in regards to the amended subject matter and Engstrom uses a figure 1 visualization controller 1102 for LEDs and remains silent in regards to the main display.

Examiner respectfully disagrees, in review figure 1 also discloses other hardware components referenced as 1122 and described in column 4 lines 19-24 include a microprocessor for processing instructions and a display to display information. Further in figure 5 microprocessor 1503 is described as being the earlier mentioned processor of figure 1 which is connected to a bus which connects to various other components of the phone including the visualizer 1102. processor connected to a bus line whose sole purpose is to process signals of that bus line is seen as a main control unit to control the sub control units such as the visualizer, DSP, and GPIO. Even though the job of the microprocessor 1503 is to simply organize the control signals created in each of the previously mentioned units this organization to create a fully functioning phone is the purpose of a mina control unit which would operate the LEDs and main display, however, such argument is moot since the claimed subject matter is seen as new matter. Further column 5 lines 30-62 describe wherein the LEDs activate depending on a user enabling a key stroke to select a menu item or a user practicing morse code for an non-audible call, these are just two example of the entire specification that describes the LEDs to display input data by a user through an input means.

The second part of the argument relates to the combination of arts. The argument is that Takagi provides a second display that is not normally seen and that suddenly appears. This surprise to the user when the second display suddenly appears is only from the normal operation of the second display turning on. Figures 6 and 7 describe the second panel 24 simply lying underneath the transparent and half mirror layer. The half mirror enables light to exit one way (such as when the display turns on) and reflect in the other (such as ambient light referenced as A). The combination requires no additional detail and is upheld since simply the second display of Takagi is replaced with an array of controllable LEDs as described by Engstrom. It is noted that the physicall location of the LEDs is not what is being combined but the method of control of the LEDs since Takagi already discloses that the secondary display can be LEDs. This action is final necessitated by amendment.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory

action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER E. LEIBY whose telephone number is (571)270-3142. The examiner can normally be reached on 9 - 5 Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Eisen can be reached on 571-272-7687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CL

June 4th, 2010

/Henry N Tran/
Primary Examiner, Art Unit 2629